EXHIBIT B

[FCC Ref. 2.1033(b)(4)]

"Description of Circuit Functions"

Circuit Description for AT7977

This is a 2400MHz Band cordless telephone for domestic use. Radio transmitter with FM technology provides greater mobility to the user within approximately 250 meters radius around the base.

Following paragraphs describe the detail of major building blocks.

1. Ringer Detection

a. Base

Incoming ringer signal is first attenuated by C60, Z2, Z3, R63 & R71. The signal is then feed to micro-controller (MCU) U1 for generating response signal according to the setting of inputs and sends digitally coded information to handset via RF link.

b. Handsets

When digitally coded information is received from the base it will be decoded at MCU U1. Then necessary ringer is generated and applied to Q11, which drive the Buzzer BZ1.

2. Surge protection

The surge absorber V1 is mounted in the Base unit. It designed to operate when voltage over 330V. In general it is common to have induced surges in the telephone line due to lightening. If it allow entering the unit damage to the unit is imminent. The line interface, fuse and ringer detected circuit is most venerable to high voltage surges and V1 surge absorber can prevent it.

3. Line control

When the unit is operated by remote handset, line control is done by MCU. It turns on transistor Q23. Then telephone line power feeds to line interface circuit (Q20, Q21), turn on the telephone line and internal voice path, and around component.

4. Power Control

a. Base unit

The main power is come from AC/DC adaptor, which provide 9V DC to the unit. Radio part, MCU and line interface related circuit is supplied with non-backup regulated 5V voltage.

b. Handset

Three cells of Ni-CAD battery(3.6V) provided necessary power to the handset. In order to keep power consumption to minimum, the radio receiver is turn on and off periodically by MCU and Q1. The MCU is supplied with regulated 3.6V by U3.

5 Fast Charge Control

In order to elongate the life of the battery, the handset unit provides fast charge timing control functions. When the handset is putted on charge cradle, the MCU on handset will start counting the charging time. Q8 will then be turned off after 8 hours for starting slow charge.

6 Radio Module

Both handsets and base use 2400MHz analogue radio that transmits and receive signal in full duplex mode. Audio and data signal is FM modulated before transmitting from the module. The radio module is fully cover with shield plate in order to minimize interference to other equipment.